

**Title of the Study: Eating Habits of Adults during the COVID-19 Quarantine**

**NCT Number: Not yet available**

**06/04/2020**

## **Objectives and Design of the Study:**

The main aim of this study is to investigate whether or not there has been a change in the daily dietary patterns of adults between the ages of 18 and 80 during the Coronavirus quarantine. The study will include individuals who spend most of the day at home in social isolation in order not to catch the virus. Since the study will be conducted as an online survey, participants will need to have access to the internet and will need to be fluent in English language.

In this study it is hypothesised that adults will change their eating habits because of a drastic difference in their everyday routine. Humans are generally sociable beings and this period of social isolation will potentially have a negative impact on them affecting their attitude towards food and eating. They may turn to consuming more food as a compensation strategy against fear and anxiety of the unpredictable situation. However, it can also be thought that some people may choose to consume healthier alternatives more including fresh fruits, green juices or more water thinking this type of nutrition would provide protection against the virus.

The study may also show that some individuals will be highly affected economically and this will alter their dietary preferences perhaps causing them to prefer less expensive foods or more plant-based foods which may be more sustainable economically.

The study is composed of an online survey with 20 multiple choice questions. The 5-minute survey includes questions about gender, age group, current country, education level, profession and the number of individuals participants are living with. There are no personal questions that may cause any ethical concern. The rest of the questions ask whether or not there has been any change in the economic status of the participants, in their eating habits and fluid intake. Detailed questions about the changes in their dietary pattern can be seen in the attached Appendix (Appendix 2).

Data collection is planned to last around 7 weeks and it is expected to reach 400 participants through the internet within the timeframe. After the desired number of participants will have completed the survey, statistical analysis will be conducted. The statistical framework of the study is given in more detail in Appendix 1.

## Appendix 1

### Statistical Framework

The target population of this study consists of countries in which COVID-19 has appeared and affected dramatically leading to lockdowns and social isolation. Therefore it is aimed to distribute this survey to countries including the UK, USA, France, Spain, Italy, Turkey, Cyprus, Germany, Iran, Jordan and others.

The aim of the survey is to get a response from everyone who is eligible to take part in the survey. Initially, volunteer sampling will be used for each country on purpose which is non-random and is a non-probability sampling approach. However, in order to combine all countries together stratified sampling, which is a form of probability sampling, can be used to get a percentage of each country according to the population of that country to have a good representative sample of the whole target population.

The data will be collected in about two months. The outcome variable is binary; measuring whether or not people have had a change in their eating habits during the quarantine period. The independent variables included are; age, gender, education, profession, number of people that respondents are living with, country of current residence, having any health problem, duration of isolation, having a change in the economic situation, type of food chosen for main meal, type of food chosen for snack, having any change in fluid intake.

The main aim is to identify whether or not there is a statistically significant difference in the eating habits of different gender groups, different age groups, different countries etc. considering each independent factor mentioned above.

SPSS version 25 will be used for data analysis as the statistical program. Significance level will be taken as  $\alpha=5\%$  and the confidence level will be reported as 95%.

The normality assumptions of the data will be checked by Kolmogorov-Smirnov and Shapiro-Wilks tests. The assumption of homogenous variances between the groups will be checked by Levene's F-test. If the data is following a normal distribution, the difference between the categories can be tested by independent samples t-test or if

the data is not following a normal distribution, difference between the categories can be tested by chi-square test or Kruskal Wallis test depending on the number of groups to be tested.

Furthermore, a binary logistic regression model can be computed to identify which factors are affecting the outcome of the change in the eating habits in quarantine period and to find out how much each factor contributes to explain the overall change in the outcome variable.

If the data contains missing data and if the missing data is completely missing at random, then complete case analyses can be used. However, if the missing data is not completely at random, then worst-best or best-worst case scenarios can be performed.

## Appendix 2

### Survey questions

Dear Participant,

By participating in this survey, you will be volunteering to contribute to the study and assessment of eating habits during the social isolation / quarantine period against the Coronavirus.

The 20-question survey should not take more than 5 minutes in total. Your answers will not be shared with anyone, but will be used anonymously only for data collection purposes.

Thank you for accepting to take part in the survey.

- There is no 'Back' button in the survey.
- You can skip questions that do not suit you.

#### **1. Please select your age group:**

18 – 24

25 – 34

35 – 44

45 – 54

55 – 64

65 – 74

75 – 80

#### **2. Please select your gender:**

Male

Female

Other

Prefer not to say

#### **3. Please indicate your highest qualification:**

High school diploma

University degree

Master's Degree or above

**4. Please choose your profession:**

Student

Teacher (public or private sector)

Academician

Lawyer

Psychotherapist

Healthcare worker (public or private sector)

Other - private sector

Other - public sector

Retired

Looking for a job

**5. How many people do you live with?**

I live alone

I live with one other person

I live with 2-3 other people

I live with 2-3 other people

I live with 4 or more other people

**6. Do you have any health problems? (Please choose between one-seven options)**

No

Yes - Cardiovascular diseases

Yes - Hypertension

Yes- Diabetes

Yes - Chronic Respiratory Diseases (asthma, COPD etc.)

Yes- Hypo/Hyperthyroidism

Yes- Cancer history

Yes- Other disease/diseases not specified

**7. Please select the country where you currently live:**

Cyprus

Turkey

The United Kingdom

Germany

Italy

France

The Netherlands

Spain

Greece

Other – Europe

Iran

Iraq

Jordan

Syria

Other- Arabic Region

The United States

Other - Not specified

**8. Please indicate how long you have been in social isolation (in quarantine) in order not to catch the Coronavirus:**

Less than 7 days

Between 7-10 days

14 days

Between 15-20 days

Longer than 20 days

**9. Do you think that extension of the social isolation period will change your eating habits (for example, increase in portion size or decrease in frequency etc.)?**

Yes

No

I don't know

**10. Has there been any change in your economic situation due to the Coronavirus outbreak? (E.g. become unemployed, closure of private workplace, cuts in the monthly income etc.)**

Yes

No

**11. If your answer to the previous question is 'yes', do you think the change in your economic situation will affect your eating habits?**

Yes

No

I don't know

**12. Do you think there has been any change in your eating habits (for example, increase in portion size or decrease in frequency etc.) since the beginning of social isolation?**

Yes

No

I don't know



**13. Do you think there has been any change in your main meal (breakfast, lunch or dinner) consumption since the beginning of social isolation?**

Yes

No

I don't know

**14. If your answer to the previous question is 'yes', which of the following changes have you observed during this period? (You can select between one - four options)**

There has been an increase in the amount of my main meals

There has been a decrease in the amount of my main meals

There has been a decrease in the consumption frequency of my main meals

The time of consumption of my main meals has changed

The type of food I prefer in my main meals or my cooking method has changed

I started taking vitamin supplements in addition to my meals

**15. If there has been a change in the type of food you choose as your main meal or in your cooking method during this time, which of the following is/are the most appropriate expression(s) for you? (You can select between one-seven options)**

I prefer frozen or canned foods more

I prefer pre-cooked ready-to-eat foods more

I prefer cooking vegetable dishes more

I prefer consuming legumes more

I prefer animal-based foods (red meat, chicken, eggs etc.) more

I cook my main meals mostly by frying or sautéing methods

I cook my main meals mostly by boiling or grilling methods

**16. Do you think there has been any change in your snack consumption since the beginning of social isolation?**

Yes

No

I don't know

**17. If your answer to the previous question is 'yes', which one or ones of the following changes have you observed during this time? (You can select between one - four options)**

There has been an increase in the amount of my snacks

There has been a decrease in the amount of my snacks

There has been an increase in the consumption frequency of my snacks

There has been a decrease in the consumption frequency of my snacks

The time of consumption of my snacks has changed

My food type and/or cooking method has changed

**18. If there has been a change in the type of food you prefer as a snack during this time, which one or ones of the following is/are among the most appropriate expression(s) for you? (You can select between one - six options)**

I prefer salty and packaged snacks such as chips, crackers etc. more

I prefer food products such as cakes, pastries, biscuits, wafers, chocolate etc. more

I prefer pastry foods such as puff pastry, pies etc. more

I prefer milk desserts such as rice pudding, custard etc. more

I prefer consuming nuts more

I prefer consuming fresh fruit more

I prefer consuming drinks such as freshly prepared fruit/vegetable juice, kefir etc. more

I prefer preparing my own snacks rather than consuming packaged foods

**19. Do you think there has been any change in your fluid intake since the beginning of social isolation?**

Yes

No

I don't know

**20. If you think there has been any change in your fluid intake since the beginning of social isolation, which one/ones of the following is/are the most appropriate statement(s) for you? (You can select between one - three options)**

There has been an increase in my water consumption

There has been a decrease in my water consumption

There has been an increase in my tea, coffee, etc. consumption

There has been a decrease in my tea, coffee, etc. consumption

There has been an increase in my alcohol consumption

There has been a decrease in my alcohol consumption